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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,194	08/30/2001	Young-Gyu Ryu	678-603 (P9456)	8499

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EXAMINER

GOLD, AVI M

ART UNIT PAPER NUMBER

2157

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/943,194	Applicant(s) RYU ET AL.	
	Examiner Avi Gold	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed on May 12, 2006. Claims 8-17 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mouko et al., U.S. Patent No. 6,678,732, in view of Aravamudan et al., U.S. Patent No. 6,006,272, further in view of Small, U.S. Patent No. 6,522,654.

Mouko teaches the invention substantially as claimed including a dynamic host configuration protocol (DHCP) server, which dynamically allocates IP addresses to client devices, to which host names are given, connected to a Transmission Control Protocol/Internet Protocol (TCP/IP) network, and an IP address allocating method using the same (see abstract).

As to claims 8 and 14-17, Mouko teaches a method for using an IP address on a LAN including a router and a LAN device, performed in the router, comprising:

upon receipt of a unique IP address request from the LAN device, allocating a non-used unique IP from a dynamic unique IP address pool having a plurality of unique IP addresses to the LAN device, and storing the allocated unique IP address corresponding to a LAN IP address of the LAN device in a unique IP address allocation table (col. 2, lines 33-37, Mouko discloses a client on LAN needing a unique IP address, col. 2, lines 27-29, Mouko discloses unique IP addresses from a DHCP server, col. 2, lines 39-45, Mouko discloses a client broadcasting IP address lease information which is responded to by the DHCP server);

determining whether the origination party's address of the packet is registered in the address allocation table (col. 2, lines 53-58, Mouko discloses the host management database checking to see if a host name is registered);

when the origination party's IP address is not registered in the unique IP address allocation table, changing the origination party's IP address of the packet to a unique IP address of the router to transmit the packet to the Internet (col. 2, lines 39-40, Mouko discloses the client broadcasting its IP address);

when the origination party's IP address is registered in the unique IP address allocation table, changing the origination party's IP address of the packet to a unique IP address corresponding to the origination party's IP address, to transmit the packet to the Internet (col. 2, lines 27-64); and

when the allocated unique IP address is returned from the LAN device, adding the allocated unique IP address returned from the LAN device to the dynamic unique IP

address pool, and deleting the returned unique IP address and its corresponding LAN IP address in the unique IP address allocation table (col. 2, lines 27-64).

Mouko fails to teach the limitation further including the router changing the originating part's IP address to a unique IP address of the router to transmit the packet to the Internet and upon receipt of a packet from the LAN device, determining whether the origination party's IP address of the packet is registered in the unique IP address allocation table.

However, Aravamudan teaches the translation of a non internet-unique network address of a network device to an internet-unique network address (see abstract). Aravamudan teaches the use of a router removing a non unique address and inserting its own Internet unique address and then forwarding the packet to its destination over the Internet (col. 1, lines 49-59).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mouko in view of Aravamudan to use a router changing the originating part's IP address to a unique IP address of the router to transmit the packet to the Internet. One would be motivated to do so because it allows packets to be easily identified.

Mouko and Aravamudan fail to teach the limitation further including that upon receipt of a packet from the LAN device, determining whether the origination party's IP address of the packet is registered in the unique IP address allocation table.

However, Small teaches a method and apparatus for hosting a logical address based network protocol suite on a high speed serial bus network (see abstract). Small

teaches the use of an action upon receipt of a packet and a table that keeps track of IP addresses (col. 3, line 64 – col. 4, line 4, col. 8, lines 27-49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mouko and Aravamudan in view of Small to; upon receipt of a packet from the LAN device, determine whether the origination party's IP address of the packet is registered in the unique IP address allocation table. One would be motivated to do so because it allows for an effective way to keep track of used IP addresses.

Regarding claim 9, Mouko teaches the method as claimed in claim 8, further comprising:

upon receipt of a packet from the Internet, determining whether the received IP address of the packet is registered in the unique IP address allocation table (col. 2, lines 53-58);

when the received IP address is not registered in the unique IP address allocation table, changing the received IP address of the packet to a LAN IP address which is an origination party's IP address having been changed to the unique IP address of the router, to transmit it to the LAN device (col. 2, lines 39-40);

when the received IP address is registered in the unique IP address allocation table, changing the received IP address of the packet to a LAN IP address corresponding to the received IP address, to transmit the packet to the LAN device (col. 2, lines 27-64).

Regarding claim 10, Mouko teaches a system for using an IP address on a LAN comprising:

a LAN device, connected to a router, for sending a request for a unique IP address allocation to the router, when an Internet application is started and it is determined that it is necessary to use a unique IP address, performing the application after receiving an allocated unique IP address from the router, transmitting to the router a packet to be transmitted to the Internet by using an origination party's IP address as the LAN device's own LAN IP address, and returning the allocated unique IP address to the router after using the allocated unique IP address; and

the router, connected to the LAN device, for receiving the request for the unique IP address from the LAN device and allocating a non-used unique IP address of a plurality of unique IP address to the LAN device;

wherein a packet received from a LAN device which is not allocated the unique IP address is transmitted to the Internet changing the origination party's IP address to a unique IP address of the router, and a packet received from a LAN device which is allocated the unique IP address is transmitted to the Internet changing the origination party's IP address to the allocated unique IP address (col. 2, lines 27-64).

Mouko fails to teach the limitation further including the router changing the originating part's IP address to a unique IP address of the router to transmit the packet to the Internet and upon receipt of a packet from the LAN device, determining whether the origination party's IP address of the packet is registered in the unique IP address allocation table.

However, Aravamudan teaches the use of a router removing a non unique address and inserting its own Internet unique address and then forwarding the packet to its destination over the Internet (col. 1, lines 49-59).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mouko in view of Aravamudan to use a router changing the originating part's IP address to a unique IP address of the router to transmit the packet to the Internet. One would be motivated to do so because it allows packets to be easily identified.

Mouko and Aravamudan fail to teach the limitation further including that upon receipt of a packet from the LAN device, determining whether the origination party's IP address of the packet is registered in the unique IP address allocation table.

However, Small teaches the use of an action upon receipt of a packet and a table that keeps track of IP addresses (col. 3, line 64 – col. 4, line 4, col. 8, lines 27-49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mouko and Aravamudan in view of Small to; upon receipt of a packet from the LAN device, determine whether the origination party's IP address of the packet is registered in the unique IP address allocation table. One would be motivated to do so because it allows for an effective way to keep track of used IP addresses.

Regarding claim 11, Mouko teaches the system as claimed in claim 10, wherein when the received IP address receives a packet being the allocated unique IP address from the Internet, said router changes the received IP address of the packet to a LAN IP

address corresponding to the allocated unique IP address to transmit the packet to the LAN device (col. 2, lines 39-45).

Regarding claim 12, Mouko teaches the system as claimed in claim 10, wherein said LAN device informs the allocated unique IP address, then it is necessary for an application performed in the LAN device to inform the other party of the LAN device's own IP address (col. 2, lines 39-40).

Regarding claim 13, Mouko teaches the system as claimed in claim 11, wherein said LAN device informs the allocated unique IP address, when it is necessary for an application performed in the LAN device to inform the other party of the LAN device's own IP address (col. 2, lines 39-40).

Response to Arguments

3. Applicant's arguments with respect to claims 8-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,684,243 to Euget et al.

U.S. Pat. No. 5,790,548 to Sistanizadeh et al.

U.S. Pat. No. 6,763,012 to Lord et al.

U.S. Pat. No. 5,159,592 to Perkins et al.

U.S. Pat. No. 6,456,625 to Itoi et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

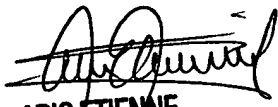
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Avi Gold

Patent Examiner

Art Unit 2157

AMG


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